flange due to the thermoforming process; and

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## In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1.-34. Canceled.

35.-81. Canceled.

82. (new) A method of making a bumper system for a vehicle, comprising steps of:

providing a reinforcement beam adapted for attachment to a vehicle frame;

thermoforming a sheet of material to form a thermoformed energy absorber configured to be supported on a face of the reinforcement beam, the energy absorber having a base flange and a plurality of thermoformed longitudinally-elongated crush boxes that extend generally perpendicularly from the base flange in a fore/aft direction parallel a direction of expected impact; the crush boxes each having opposing side walls and orthogonally-related end walls and a side-wall-supported front wall with the crush boxes each being spaced apart from each other along the base flange; the crush boxes each defining a separate rearwardly-facing opening; the energy absorber defining a forward-facing surface and a rearward-facing surface, each being open and unobstructed in a linear direction parallel the fore/aft direction and not having undercut surfaces, the step of thermoforming including passing a portion of mold tooling in a forming direction parallel the fore/aft direction through the base flange linearly into the rearwardly-facing openings defined by the crush boxes and stretching the opposing side walls to have a thickness dimension less than a thickness of the front walls and of the base

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assembling the energy absorber to the beam including abutting the thermoformed energy absorber against the beam.

- 83. (new) The method defined in claim 82, wherein the step of thermoforming includes forming crush boxes having at least one laterally-defined concavity in one of the side walls such that the crush boxes, in front view, define one of an "H" shape, a "T" shape, an "X" shape, and a "C" shape.
- 84. (new) The method defined in claim 82, wherein the step of thermoforming including forming crush boxes with at least one of the side walls having a wavy shape with undulations that extend parallel the fore/aft direction.
- 85. (new) The method defined in claim 82, wherein the step of thermoforming includes, starting at a center of the energy absorber, forming inboard ones of the crush boxes to have a different height dimension in the fore-aft direction than outboard ones of the crush boxes.
- 86. (new) The method defined in claim 82, wherein the step of thermoforming includes forming at least one side wall to include a front portion defining a first plane, a second portion defining a second plane parallel the first plane, and an offset connecting portion that, when the bumper system is impacted, cases the first and second portions to telescope overlappingly onto each other.

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87. (new) The method defined in claim 82, including providing a second sheet of material

and including bonding the second sheet to the first-mentioned sheet to form air-filled air-

cushioning pockets within the crush boxes.

88. (new) The method defined in claim 87, wherein the second sheet of material includes

vents for controlling flow of air exiting the air-cushioning pockets during an impact.

89. (new) The method defined in claim 82, wherein the face of the reinforcement beam

includes one of a depression feature and a protrusion feature, and the base flange includes the

other of the depression feature and protrusion feature, and wherein the step of abutting includes

engaging the one feature into the other feature to retain the energy absorber on the face of the

reinforcement beam upon an impact against the bumper system.

90. (new) The method defined in claim 89, wherein the depression feature is a channel, and

the protrusion feature is a ridge.

91. (new) The method defined in claim 82, including a step of forming a second

thermoformed energy absorber with second crush boxes formed to mate against the first-

mentioned crush boxes.

92. (new) The method defined in claim 82, wherein the beam is longitudinally swept, and

wherein the thermoformed energy absorber is flexible, and including bending the energy

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absorber to flexibly deformingly engage a face of the beam.

93. (new) A method of forming a bumper system comprising steps of:

providing a beam;

thermoforming an energy absorber from a sheet of material to have a base flange and thermoformed crush boxes formed therein, the crush boxes being spaced apart and each having side walls, end walls and a face wall to form a box shape, the step of thermoforming including forming at least one of the side walls to include a front portion defining a first plane, a second portion defining a second plane parallel the first plane, and an offset connecting portion that, when the bumper system is impacted, cause the first and second portions to telescope overlapping onto each other in a predictable manner.

94. (new) A method of forming a bumper system comprising steps of:

providing a bumper beam having a face and at least one elongated recess formed in the face; and

thermoforming an energy absorber from a sheet of material to have a base flange and crush boxes formed in the energy absorber in a direction perpendicular to the base flange, the step of thermoforming including forming at least one thermoformed ridge extending from the base flange into engagement with the recess to retain the energy absorber on the face during a vehicle crash.

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95. (new) The method defined in claim 94, wherein the recess comprises a longitudinally-

extending channel formed in a face of the beam.

96. (new) A method of forming a bumper system comprising steps of:

providing a metal tubular bumper beam having a face;

providing a first polymeric energy absorber having energy-absorbing blocks selected

from one or both of hollow crush boxes and foam blocks; and

thermoforming a second polymeric energy absorber from a sheet of material, the

second polymeric energy absorber being configured to cover a substantial portion of a front of

the first polymeric energy absorber, the second polymeric energy absorber including a base

flange engaging the first polymeric energy absorber and including at least one crush box

formed therein.

97. (new) The method defined in claim 96, wherein the first and second polymeric energy

absorbers include mating surfaces that frictionally and detentingly engage to retain the energy

absorbers together.

98. (new) A method of making a vehicle bumper system comprising steps of:

providing a reinforcement beam having a face and being adapted for attachment to a

vehicle frame;

providing an energy absorber abutting the face, the energy absorber including a

thermoformed component formed from a sheet of material; and

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providing a fascia;

covering the beam and the energy absorber using the fascia, with the thermoformed component having a base sheet adjacent the face and a plurality of crush boxes extending forwardly from the base sheet into engagement with the fascia; the crush boxes each having opposing side walls and a front wall that define orthogonally-related planes, and also having top and bottom walls that are undulating in a longitudinal direction with alternating convex and concave regions; the crush boxes being open on at least one side to facilitate thermoforming the thermoformed component, the crush boxes defining shapes selected from a group of shapes where at least one of the side walls defines a concavity.

- 99. (new) The method defined in claim 98, wherein the at least one side wall has a shape consisting of one of the following shapes: I, H, C, T, and X.
- 100. (new) The vehicle bumper system defined in claim 99, wherein the side walls of the crush boxes include at least two different ones of the shapes I, H, C, T, and X.
- 101. (new) A method of forming a vehicle bumper system comprising steps of:

providing a reinforcement beam having a face and being adapted for attachment to a vehicle frame, the reinforcement beam having a channel formed into the face;

thermoforming an energy absorber from a sheet of material, the thermoformed energy absorber being configured to abuttingly engage the face; and

assembling a fascia over the beam and the energy absorber, with the thermoformed

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energy absorber having a base sheet abutting the face and having a plurality of crush boxes extending forwardly from the base sheet into engagement with the fascia; the thermoformed component further having a rearwardly-extending feature formed into the base sheet that extends into the channel in the face of the beam for assisting in retaining the energy absorber on the face during a vehicle crash.